

**DEPARTMENT of ENVIRONMENTAL SERVICES**  
**Water Supply & Pollution Control Division - Biology Bureau**

**LAKE TROPHIC DATA**

**MORPHOMETRIC:**

Lake: OTTER POND	Lake Area (ha):	5.02
Town: CENTER HARBOR	Maximum depth (m):	6.5
County: Belknap	Mean depth (m):	2.3
River Basin: Merrimack	Volume (m <sup>3</sup> ):	117000
Latitude: 43°40'32" N	Relative depth:	2.6
Longitude: 71°32'37" W	Shore configuration:	---
Elevation (ft): 690	Areal water load (m/yr):	4.28
Shore length (m): 600	Flushing rate (yr <sup>-1</sup> ):	1.80
Watershed area (ha): 44.0	P retention coeff.:	0.68
% watershed ponded: 0.0	Lake type:	natural

**BIOLOGICAL:**

**8 February 1995**

**6 September 1994**

DOM. PHYTOPLANKTON (% TOTAL)	#1	ASTERIONELLA 70%	DINOBRYON 50%
	#2	UROGLENOPSIS 25%	CHRYSOSPHAERELLA 40%
	#3		
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			10.22
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 41%	NAUPLIUS LARVA 23%
	#2	POLYARTHRA 20%	KERATELLA 12%
	#3	CILIATE SPP. 13%	KELICOTTIA 10%
ROTIFERS/LITER		89	155
MICROCRUSTACEA/LITER		3	315
ZOOPLANKTON ABUNDANCE (#/L)		109	470
VASCULAR PLANT ABUNDANCE			Common
SECCHI DISK TRANSPARENCY (m)			4.4
BOTTOM DISSOLVED OXYGEN (mg/L)		7.0	2.0
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

**SUMMER THERMAL STRATIFICATION:**

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**Lake: OTTER POND  
Town: CENTER HARBOR

	8 February 1995		6 September 1994		
DEPTH (m)	1.5	3.0	2.0		5.0
pH (units)	6.5	6.4	7.0		6.9
A.N.C. (Alkalinity)	8.3	8.7	6.5		6.3
NITRATE NITROGEN	0.07	< 0.10	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.41	0.41	0.24		0.24
TOTAL PHOSPHORUS	0.010	0.016	0.011		0.010
CONDUCTIVITY ( $\mu$ mhos/cm)	32.2	32.8	28.6		29.3
APPARENT COLOR (cpu)	20	21	17		22
MAGNESIUM			0.48		
CALCIUM			3.0		
SODIUM			1.0		
POTASSIUM			0.50		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	4	4	4		4
TN : TP	48	26	22		24
CALCITE SATURATION INDEX			3.0		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1994**

D.O. S.D. PLANT CHL TOTAL CLASS

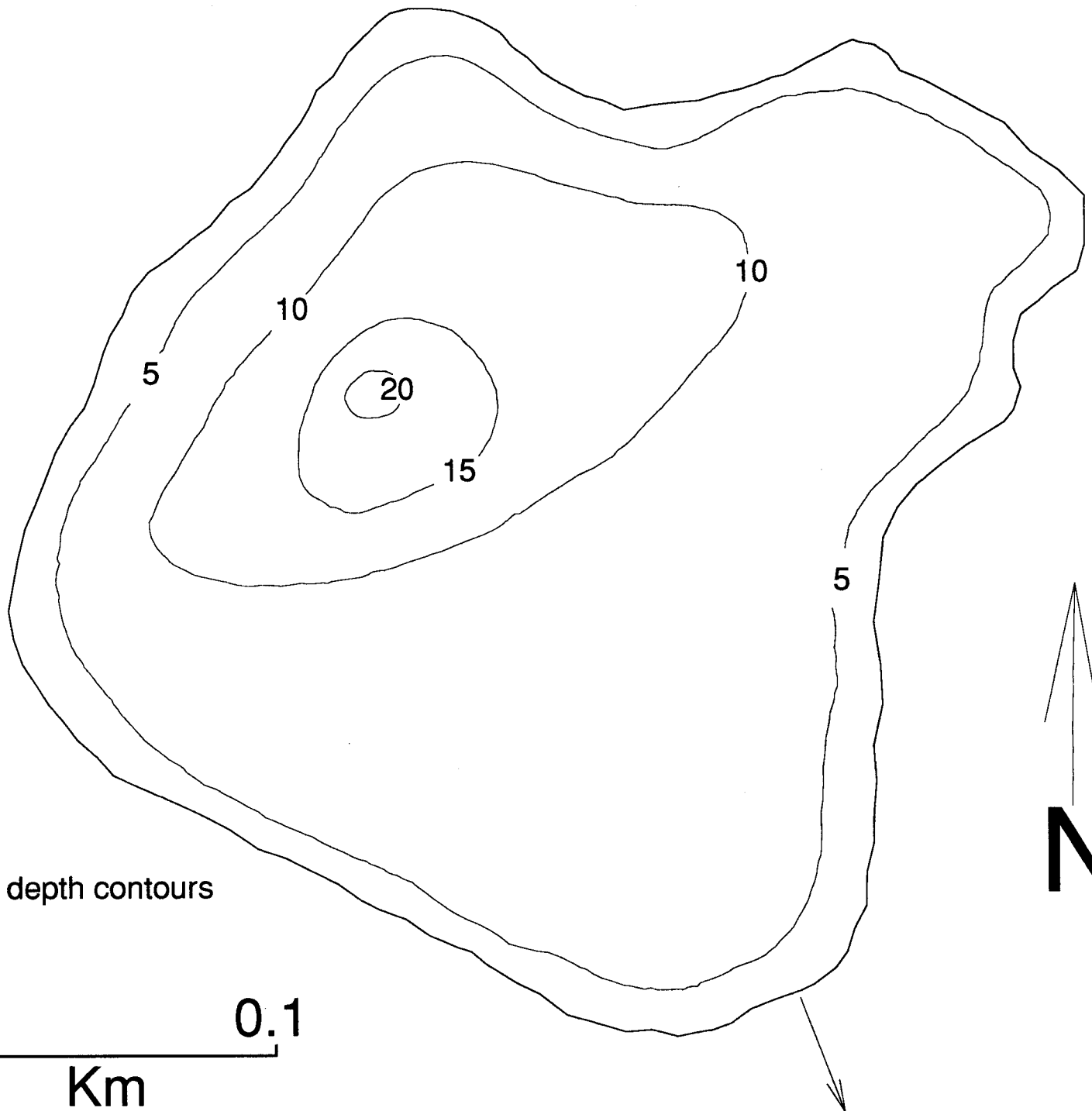
**	2	3	2	7	Meso.
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**COMMENTS:**

1. AKA Tuttle Pond.
2. No public access; one adequate road into the pond with a locked gate; one cottage on the shore.

# Otter Pond

## Center Harbor



5 foot depth contours

0 0.1  
Km

[illegible]

TOWN: CENTER HARBOR  
WEATHER: OVERCAST & WINDY

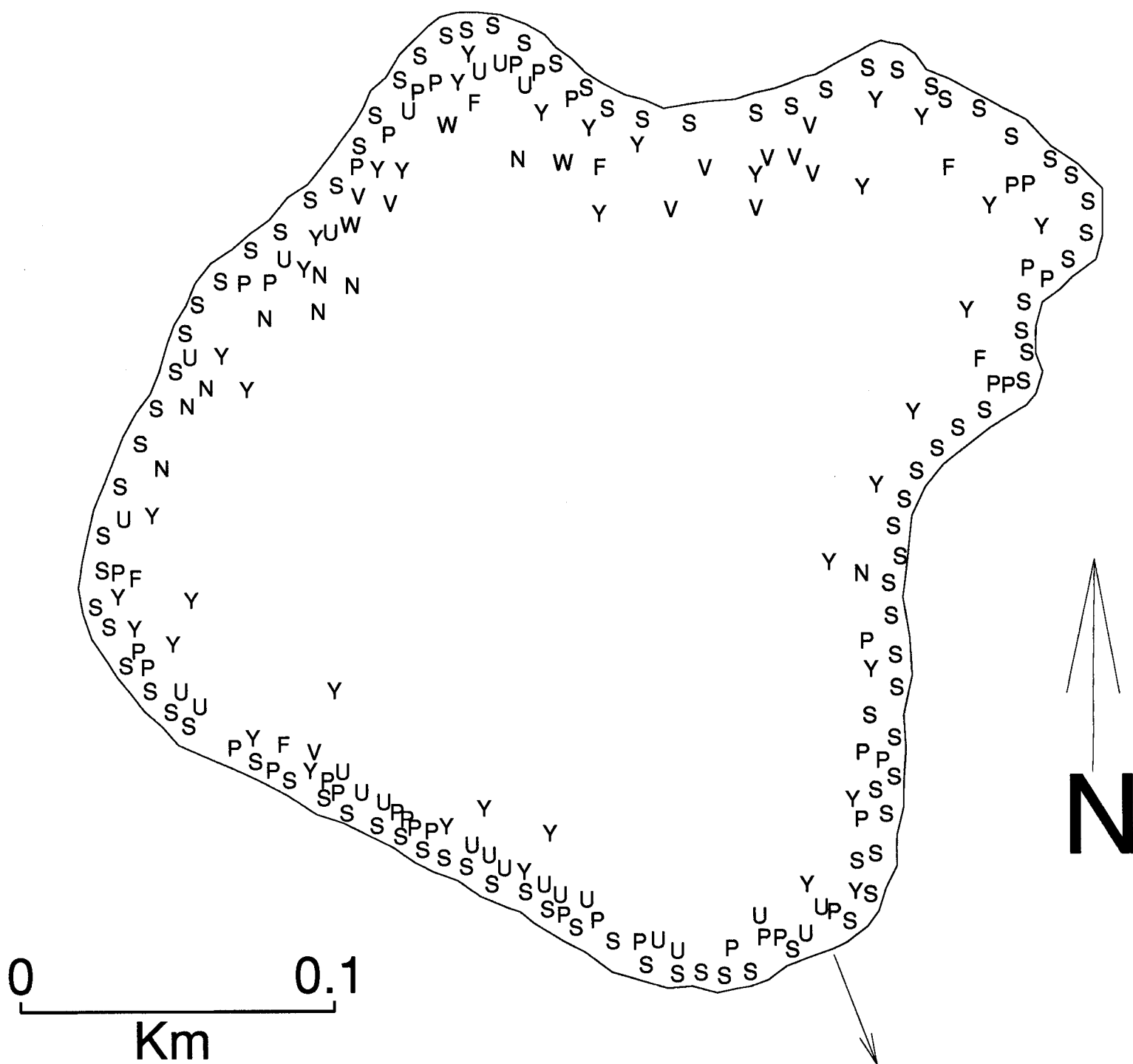
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**COMMENTS :**

**\*Dissolved oxygen values are in mg/L**

# Otter Pond

## Center Harbor



**AQUATIC PLANT SURVEY**

LAKE: OTTER POND TOWN: CENTER HARBOR DATE: 09/06/94

**TOWN: CENTER HARBOR**

DATE: 09/06/94

[illegible]

OVERALL ABUNDANCE: Common

**GENERAL OBSERVATIONS:**

1. Sterile thread-like leaves and bass weed were observed over most of the pond bottom, but are not depicted on the map because of their abundance.
2. Bladderwort was collected around most of the fallen trees along the edge of the pond.
3. Pond surface was enlarged by beaver; stumps and fallen trees were located along the water's edge.